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IN ONE SECTION

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EDITORIAL DEPARTMENT NOTE

In this issue of our Bulletin we are publishing what we consider an unusually good paper on the subject of budgeting branch office expenses. The plan is rather unique, the author's discussion of it is clear and it is well illustrated by numerous exhibits. The plan discussed here involves only sales and service branches although the company has excellent budgetary control also of all production.

E. A. Kleinschmidt, the author of this paper, is a native of Missouri. He began his business career with the National Enameling & Stamping Company in the Time and Cost Department, and finally became chief cost accountant of their St. Louis plant. In 1911 he became associated with the Pilsbry-Becker Engineering & Supply Company, in St. Louis of which he later became Secretary. In 1920 he helped to organize the York Products Corporation, representing a merger of the Pilsbry-Becker Company and five other companies, all of whom were exclusive sales and service representatives throughout the western half of the United States for the York Manufacturing Company, of York, Pennsylvania, manufacturers of refrigerating, cold storage and air conditioning equipment. He served first as Secretary and later as Secretary-Treasurer of the merged company, and when, in 1927, the York Manufacturing Company, of York, Pennsylvania, brought about a consolidation of all its selling and service affiliates with the manufacturing unit, he was elected Secretary and General Assistant Treasurer of the new company—the York Ice Machinery Corporation—with headquarters in York, Pennsylvania. This position he still occupies. He is also a member of the Board of Directors of that company. This paper was delivered on the occasion of a visitation by the members of our Harrisburg Chapter to the plant of the York Ice Machinery Corporation at York, Pa., on November 2, 1932.

The second article in this issue of our Bulletin deals with a subject about which we have published very little. Safety hazards have been greatly increased on account of the increased use of machinery, which has made our high-speed mass production possible. In this article the author outlines the safety plan in operation in his company and points out many of the benefits derived from its careful observance.

E. S. McClary, the author of this paper is a native of Vermont. He was educated in the schools of his native state, graduating from Craftsbury Academy, Craftsbury, Vermont.

His first position was in a retail clothing house in Waterbury, Connecticut. Subsequently, after completion of an extension school course, he entered the field of electrical engineering. In 1908 due to personal circumstances he began his accounting career. From 1914 to 1920 he served as General Office Manager at the Geometric Tool Co., New Haven, Conn. From this connection he became associated with the Baker-Goodyear Co., Certified Public Accountants, New Haven, Conn. Leaving public work he again became engaged in industrial accounting in Bridgeport, Conn., in 1921. In 1922 he accepted the position of Controller with the Bridgeport Brass Company. In February, 1928, he was appointed Assistant Secretary and Assistant Treasurer. In June, 1931, he was elected Secretary-Treasurer.

Mr. McClary has been a member of the N. A. C. A. for many years and is one of the charter members of the Bridgeport Chapter. He has served on the Board for two years in the capacity of Director of Membership.

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BUDGETARY CONTROL OF BRANCH OFFICE EXPENSE

By E. A. Kleinschmidt,
Secretary and General Assistant Treasurer,
York Ice Machinery Corporation, York, Pennsylvania

Introduction

TO LEAD you to a clearer understanding of the discussion to follow, it is necessary, I believe, to give you a hasty sketch of our set-up as it relates to the functions of sales and service as distinguished from manufacturing and administration.

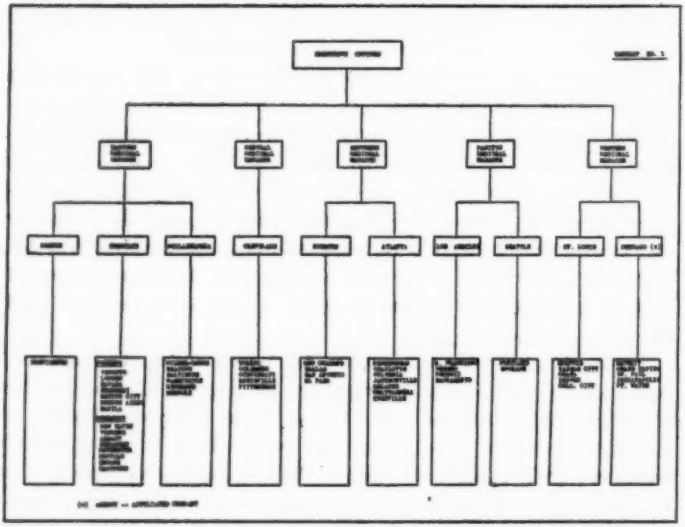
Our corporation is represented in the field by direct sales and service offices located throughout the United States, the lone exception being one distributor which, however, is an affiliated company. I mention this because our branch set-up occupies a very important place in our corporate existence. Each is practically self-contained in the matter of selling and execution, including the billing, costing and collection of accounts; and the expenditures authorized by them in the sale and execution of this work represent in the aggregate approximately 50% of the corporation's total expense.

To enable you to better visualize this branch set-up we have prepared and submit a chart, designated as Exhibit 1, showing the extent of this part of our organization. From this you will observe that we are represented in the field by 64 direct branches, 54 of which we term sub-branch offices, these being accountable to the 10 main branch offices indicated, each in charge of a branch manager, who in turn are accountable to the five regional managers designated. These men accept full responsibility for carrying out the policies of the company in the field and maintain contact through the branch set-up with its customers. The home office at York contributes only a general supervision to see that the policies of the company are carried out, and to amend them when that appears advisable.

Further sales and service coverage is obtained through the fact that each of the sub-branches shown locates its salesmen at strategic points in its own district. In addition, there are jobbers' connections and affiliated companies in most foreign countries, not shown in the exhibit.

Initial Attempt at Branch Budget

A little more than three years ago we, in common with many others, began to sense the need for a closer supervision of our disbursements. This need was magnified in our own case by the fact, as pointed out before, that so large a proportion of our disbursements was authorized in the branches, where rather broad authority for control had been given, and properly so, from a functional standpoint.



In an attempt to harness this situation we asked each branch manager to submit to us a budget, or estimate, of the expenditures contemplated during the ensuing fiscal year, beginning October 1. These were accepted as submitted and comparisons with actuals in detail were submitted by the respective branch managers from month to month. Before the second year was well under way our experience revealed to us the sins of omission in that plan. Aside from the possibility of having made the branches conscious of the fact that some scrutiny was being given the matters of expenditures authorized by them, the plan failed to produce constructive results. It was not effective because;

1. Having been prepared by those who contemplated and controlled the expenditures it was liberal enough to call for no heroic measures to reduce expenses.
2. Recognition was not given the probable variation in sales volume and the relation of expense dollar to sales dollar.
3. Its aggregate total was not controlled by available gross profits from which these expenses must be paid.

While that method of budget control was in vogue with the branches, we had undertaken the introduction of standard costs at our factory, involving the necessity for budgets of the departments affected, and which led to the development of what we term an "activity budget." Recognizing the possibilities under this method of control, we decided to develop it for branch application, having in mind at the same time, standardization of allowances for given types of expense among the various offices.

While a considerable assortment of literature is to be found on the subject of standards as applied to manufacturing, comparatively little has been written concerning the development of standards for the sales and executive branches of an industrial enterprise similar to our own. Throughout the design and computation of the branch budgets, hereinafter elaborated upon, we have borne in mind that we may wish to employ them, at some later date, as standards of performance for the partial measurement of a Branch Managers' Incentive Plan. For that reason some additional care and attention has been exercised in the construction and inauguration of a program that would necessitate a minimum number of revisions. Numerous plans were considered in the light of such a possibility and either discarded or so modified that they may later fit into the outline we have in mind.

Determination of Normal Volume

With this decision it became apparent that we must, first of all, forecast or budget our sales and then construct our expense budgets around these sales forecasts so that a relationship permitting of a profit would be maintained. After a study of the various factors entering into our business we selected the *Sales Volume Dollar* basis as the most accurate barometer with which to measure activity, and for the purpose of this paper, I selected $15,000,000 as

"Normal," or an axis, around which to build the hypothetical budgets.

The selection of a figure as normal upon which to hinge the graduation of volume activity is of no vital importance as long as the base rates of expense to be applied to the component parts of that amount are so established that they bear a proper relation to the normal volume employed. In other words, we could choose a normal figure of $18,000,000 and obtain the same result, the only difference lying in the fact that the base rates for various expense accounts would be decreased proportionately. In budget work of this nature we, of course, endeavor to forecast the normal sales with the greatest possible accuracy, but we desire to point out that an error in this figure would not destroy the effective application of the resulting budget allowances.

There are many mediums of activity measurement, such as tons, carloads, million feet, square yards, barrels, pieces, types and designs, and so on through the list of types associated with a wide variety of industries. Our business, falling into the contracting classification wherein wide assortments of equipment are sold in a predetermined lump sum figure, is most easily measured on the sales dollar basis referred to above.

We obtained from the Sales Department their opinion (which is expressed in terms of percentages) of the proportionate volume to be supplied by each branch office. This, incidentally, was determined not from history or experience, but instead was based on potential, the determination having resulted from an analysis made by the Sales Promotion Department and representing a composite of such factors as:

(a) Valuation of commercial and industrial plants, secured from department of commerce.
(b) Valuation of products manufactured, secured from department of commerce.
(c) Quota for electric refrigerators based on number of wired homes in United States, secured from National Electric Light Association.
(d) White population other than rural.
(e) Bank clearings.

These "Normals" are treated as 100% activity for each Main Branch and the sales volume is graduated in 10% brackets up and

down from this figure. Through this procedure a budget is provided whose application is made automatic without definite knowledge in advance as to the volume that will be secured and thereby avoiding the necessity for revised budgets in mid-year should the anticipated volume prove unavailable.

This desire to eliminate the necessity for mid-year budget revisions does not imply that we advocate an inflexible allowance in the face of abrupt or unforeseen changes in physical conditions or pre-season plans. The elimination of these revisions applies to the unknown future volume to be obtained during the ensuing period.

Determination of Activity

Tests of past sales performance convinced us that the determination of activity for individual branches could not be based upon each month's sales volume. Our business, being largely of a contracting nature, is erratic as to volume and, being seasonal in character, the sales are not uniformly distributed by months throughout the year. We, therefore, employed the plan of determining activity by the use of cumulative sales. In other words, we accept the total of the last 12 months as representing the activity for the ensuing month. Exhibit 2 will clarify the method described. A review of this exhibit will readily convince you of the impracticability, in our case, of employing any other basis for the determination of activity. Tests on three and six months' bases were made but they proved too erratic for practical administration.

This violent fluctuation might not inject itself into other enterprises with more constant and uniform sales volume. While we have found the 12 months' basis the most suitable for our operation, it is entirely possible that a three or six months' basis might be used with satisfactory results in other lines. It will be observed that the shorter the period employed, the more quickly the expense allowances are confined to their proper activity brackets. The selection of a proper basis upon which to base activity is an important matter and due consideration should be afforded the effects of shorter periods to be certain that their introduction would not control expense allowances more rapidly than practical operation of independent sales organizations would permit.

As a matter of clarity note that the monthly sales are entered in the second column from the left on Exhibit 2, while the first figure

appearing in the third column represents the addition of the 12 months' sales from October, 1930, to and including September, 1931. The selection of the activity as shown in Column 4 is accomplished by comparing the 12 months' total with the Key at the

BRANCH "C" EXHIBIT NO. 2

HYPOTHETICAL ACTIVITY SCHEDULE

#1 MONTH	#2 MONTHLY SALES	#3 SALES LAST 12 MONTHS	#4 % ACTIVITY	#5 APPLICABLE TO MONTH OF
OCT. 1930	$ 60,000			
NOV. "	100,000			
DEC. "	70,000			
JAN. 1931	80,000			
FEB. "	40,000			
MAR. "	140,000			
APR. "	120,000			
MAY "	60,000			
JUNE "	60,000			
JULY "	70,000			
AUG. "	80,000			
SEPT. "	50,000	$ 930,000	90	OCTOBER
OCT. "	30,000	900,000	80	NOVEMBER
NOV. "	30,000	850,000	80	DECEMBER
DEC. "	90,000	850,000	80	JANUARY
JAN. 1932	210,000	980,000	100	FEBRUARY
FEB. "	250,000	1,190,000	110	MARCH
MAR. "	160,000	1,210,000	120	APRIL
APR. "	70,000	1,160,000	120	MAY
MAY "	90,000	1,190,000	120	JUNE
JUNE "	60,000	1,190,000	120	JULY
JULY "	40,000	1,160,000	120	AUGUST
AUG. "	30,000	1,110,000	110	SEPTEMBER

KEY TO ACTIVITY

SALES			%
MINIMUM	MAXIMUM	AVERAGE	ACTIVITY
$ 350,000	$ 450,000	$ 400,000	40
450,000	550,000	500,000	50
550,000	650,000	600,000	60
650,000	750,000	700,000	70
750,000	850,000	800,000	80
850,000	950,000	900,000	90
NORMAL 950,000	1,050,000	1,000,000	100
1,050,000	1,150,000	1,100,000	110
1,150,000	1,250,000	1,200,000	120
1,250,000	1,350,000	1,300,000	130
1,350,000	1,450,000	1,400,000	140

bottom of the exhibit. The resulting activity is taken for the next succeeding month. The maximum and minimum sales set forth in the Key correspond with similar information shown on the budget sheets, to which we will refer in more detail in subsequent paragraphs. It is obvious, of course, that the Key is secured through

the sales volume analysis previously referred to, the maximum and minimum figures being computed in 10% brackets from the normal established for each office.

Branch and Regional Managers understand this method and can, therefore, and do, visualize well in advance the activity column in which they are likely to be operating in the future, permitting them to adjust their organization and expenses commensurately.

For instance, in the case of the particular branch whose hypothetical sales volume forms the basis of Exhibit 2, observe the three high months of January, February and March, 1932. During October, November and December, 1931, that Branch Manager was in a position to forecast the probable increase in sales volume during the first three months of the calendar year 1932 through his intimate knowledge of outstanding quotations and daily contact with his sales department. With the forecasted increase in volume he was in a position to gauge his activity by reference to the much lower sales volumes booked during January, February and March of 1931. Unquestionably he interpreted this into terms of increased activity percentage several months before the increase actually occurred and enlarged his organization, checked his inventories and made general preparation for the additional load.

Conversely as he approaches January, February and March, 1933, his sales forecasts may indicate no such volume as he enjoyed during the similar period of 1932, warning him in advance of the decline in activity and he will trim his organization and current expenses to suit.

This feature of activity budget control forms a real tool for capable and successful branch management and one over which our field managers are keenly enthusiastic.

A wise manager will, however, look even farther, realizing as he does that the application of the budget is cumulative in effect and that he must, therefore, finish the year with a total actual expense for 12 months not in excess of the budgeted allowance for that period in whatever column of activity the last month of the year may find him. He surveys at the beginning of the year the possibilities of sales accomplishment and elects to shape his monthly expense at a rate that is permissible under the column of activity in which his estimate of ***minimum*** sales for the year places him.

This allows him some latitude for expansion, if by good fortune he is able to effect sales in excess of his minimum forecast.

Transfer Cost and Gross Branch Profits

In order that you may completely disassociate our manufacturing units here at York from our branch office sales and service organizations, we wish to explain that the product we manufacture is delivered to our branches on the basis of a factory sales price, which for branch purposes we term "Transfer Cost." Consequently branch gross profits are computed by employing these transfer costs as their cost of sales. Analyses of gross profits by individual branches were made and the general average for all branches combined. This average, in conjunction with the sales volumes afforded by the various activity brackets, established the aggregate total of anticipated branch gross profits. It was our purpose to keep the budgeted expense allowances sufficiently below anticipated gross branch profits to permit a satisfactory return on invested capital.

To eliminate any possible confusion in the interpretation of any subsequent discussion concerning gross profits and gross profit percentages, it should be borne in mind that no portion of what we term "factory profits" are included.

Establishment of Base Rates

The first step toward developing base rates for the wide variety of expense classifications employed in our branch accounting lay in the careful analyses of expenses for previous years. This study included the computation of individual branch averages, as well as averages for all branches combined. These accounts were examined by groups, the first section involving expenses of a type that, in our judgment, should prove fairly uniform in all territories when measured in relation to the sales volume produced by each territory. Examples of such accounts are:

1. Salaries of clerks and stenographers
2. Dues and subscriptions
3. Credit and collection expense
4. Stationery and office supplies

together with many others. For such items we sought to create a

base rate per $1,000 sales volume to be applied to all branches. In actual practice we found that some branches exceeded the allowances by a considerable margin, prompting us to investigate the reason and to effect a cure.

The establishment of these uniform base rates was not predicated entirely upon history, but in many instances modified by our judgment of an adequate allowance under efficient operating conditions. The point we wish to convey is that we do not advocate acceptance of general historical averages for standards, but rather that such information taken from past experience should be tempered by a further examination of the propriety of the rate under more ideal operating conditions.

In any business enterprise covering a nation-wide field, it is inevitable that special conditions will be encountered and that flexible allowances must be recognized as essential to the compilation of a budget that will stand the test of practical operation. Therefore, we selected those expense accounts that required individual treatment and through logical methods of approach established rates for each branch separately.

For example, it is obvious that the allowances per $1,000 sales volume for "Traveling and Automobile Expense" should be much lower in New England, with its densely populated areas coupled with short distances between metropolitan districts, than the St. Louis Territory, which extends from the Western Illinois line to the eastern boundary of Oregon and from Canada on the north to Albuquerque, New Mexico, on the south. We, therefore, took into consideration such pertinent factors as population per square mile, total areas of the territories, road conditions and the general geographical location of the principal metropolitan areas. Fortified with such data we modified previous historical averages and arrived at an arbitrary base rate with which to control such expenses. Similar studies were made of such items as "Salesmen's Salaries," "Repairs of Automotive Equipment," etc.

A third type of expense classification is influenced more directly by the laws of the various states in which our branches operate, such as "License and Corporate Taxes" and "Liability and Compensation Insurance." The base rates for these expenses were established through a historical study of actual disbursements modified by any advance knowledge we were able to secure from

our branches concerning probable adjustments of tax and insurance rates for the ensuing period.

The base rate for the items classified as fixed charges, such as depreciation, fire insurance, personal and real property taxes, etc., were based upon the capital assets employed by the various branches and the insurance and tax valuations of buildings, as well as average inventories maintained at those points.

The accuracy of an activity budget of this type is directly dependent upon the judgment exercised in the selection of these base rates. Too much emphasis cannot be placed upon the proper evaluation and adjustment of historical averages, accompanied by the injection of forecasted conditions, to satisfactorily care for proposed plans not yet placed into effect. The entire budget structure rests upon the base rates employed; consequently their computation and selection should be made with the utmost precision.

Intra-Office Variability

In order to explain the computation of the basic factors adequately we must first elaborate upon the utility of the variability figures which we employ throughout our entire budget plan. Certain types of expense cannot be expected to increase or decrease in direct proportion to sales volume fluctuation. For the purpose of diminishing or accelerating the expense allowances between the 10% activity brackets hereinbefore referred to, we have, by further investigation, determined that certain types of expenses increase or decrease in definite ratios to volume. As a definition of the variability figures now in effect, note that:

1. 35% variability means that, as the sales volume increases or decreases 10%, the total expense allowance is to be increased or decreased 35% of 10% or 3.5%.
2. 80% variability means that as the sales volume increases or decreases 10%, the total expense allowance is to be increased or decreased 80% of 10% or 8%.
3. 100% variability means that as the sales volume increases or decreases 10%, the total expense allowance is to be increased or decreased 100% of 10% or 10%. Consequently 100% variability indicates an expense variable in direct proportion to volume fluctuation.

4. No variability means that the expense item is fixed and constant regardless of the volume secured.

Incidentally, we have standardized on the variability figures employed and the branch budgets incorporate only the following: 35, 50, 65, 80 and 100%.

These figures were found to be most nearly suitable for our requirements and are used in a standard manner for the sake of uniformity. Further comment upon the application of these figures to individual branch budgets will be made in subsequent paragraphs.

A study of each individual expense classification and the development of unit costs per $1,000 of sales volume revealed that the branches with lower sales volumes required greater allowances per $1,000 than was the case with branches securing greater sales volumes. This condition has been apparent for some time prior to the establishment of these budgets and to compensate for this variance we developed a table of basic ratio factors, the application of which to the general base expense rates per $1,000 sales volume, serves to equalize these differences in requirements. Please refer to Exhibit 3.

Development of Inter-Office Basic Factors

In the first left column of Exhibit 3 the minimum sales of $806,000 represents the volume below which the rate of expense per $1,000 sales volume must not increase. This point represents the minimum efficiency of branch operation.

The maximum sales of $2,531,000 represents the volume above which the rate of expense per $1,000 sales volume does not decrease. This represents the point where the maximum efficiency of branch operation is reached and sales greater than this maximum do not increase the efficiency.

The selection of the minimum, average and maximum volume figures is predicated upon actual experience in branch operation. In this connection it is appropriate to mention that the volume figures shown in the first left-hand column have no relation to the volume quotas representing normal sales for the individual offices previously discussed. The volume figures listed in Exhibit 3 are purely for the purpose of measuring the operating efficiency of branches securing widely different sales volumes and to introduce

DEVELOPMENT OF HYPOTHETICAL VARIABLE INTER-OFFICE BASIC FACTORS PER $1,000 SALES VOLUME — EXHIBIT NO. '5

(EMPLOYING $1.00 AS BASE RATE)

#1 VOLUME	#2 AVERAGE VOLUME	#3 TOTAL ALLOWABLE EXPENSE AT 100% VARIABILITY AT $1.00 PER $1000 SALES VOLUME	#4 TOTAL ALLOWABLE EXPENSE AT 80% VARIABILITY AT $1.00 PER $1000 SALES VOLUME	#5 ALLOWABLE EXPENSE FACTOR PER $1.00 BASE RATE	#6 CLASSIFICATION OF BRANCHES
MINIMUM UP TO					
$ 806,000 TO $ 887,000	$ 846,000	$ 846	$ 977	1.16	BRANCH "I" BRANCH "H" BRANCH "E"
887,000 " 976,000	931,000	931	1,045	1.12	
976,000 " 1,074,000	1,025,000	1,025	1,120	1.09	BRANCH "G"
1,074,000 " 1,181,000	1,128,000	1,128	1,202	1.07	BRANCH "C"
1,181,000 " 1,299,000	1,240,000	1,240	1,292	1.04	
1,299,000 " 1,429,000	1,364,000	1,364	1,391	1.02	
1,429,000 " 1,572,000 (AV'GE)	1,500,000	1,500	1,500	1.00	BRANCH "D"
1,572,000 " 1,729,000	1,650,000	1,650	1,620	.98	
1,729,000 " 1,902,000	1,815,000	1,815	1,752	.97	BRANCH "F" BRANCH "B"
1,902,000 " 2,092,000	1,997,000	1,997	1,898	.95	
2,092,000 " 2,301,000	2,197,000	2,197	2,058	.94	
2,301,000 " 2,531,000	2,416,000	2,416	2,233	.93	BRANCH "A"
UP TO MAXIMUM					

variable basic factors to equalize the fluctuation in efficiency. At no other point in this outline do we again employ or refer to this particular volume segregation. It is for the sole purpose of establishing basic factors.

Column 3 of Exhibit 3 lists the allowable expense at 100% variability predicated upon a base expense rate of $1 per $1,000 of sales volume. For example, an office securing an average volume of $1,500,000 annually would be entitled to an expense allowance of $1,500 per year for any expense account whose base rate was established at $1.

The computation of the basic factors is constructed around volume increases of 10%, beginning with the minimum figure of $806,000. The average volume at which a branch attains normal efficiency is established at $1,500,000 and the $1 factors are developed from this base.

The following will serve as an example of the method of computing the basic factor for the $1,299,000 to $1,429,000 classification. $1,500 — $1,364 = $136 decrease in allowable expense at 100% variability. $136 × 80% = $109 decrease in allowable expense at 80% variability. $1,500 — $109 = $1,391 allowable expense at 80% variability. $\frac{\$1,391}{\$1,364}$ = $1.02 Basic Factor at 80% variability.

The other basic factors are worked out in a similar manner. At this point, however, we direct your attention to the fact that all inter-office variability figures for the purpose of developing these factors are based upon 100% or 80% only. All intra-office variability figures of less than 100% are treated as 80% in establishing the basic factors. The employment of lower rates of variability for the adjustment of inter-office base expense rates serves to graduate the allowance to an unwarranted extent. Consequently the limit of variability for this purpose only is established at 80% and the selection of that limit is of an empirical nature. During the preliminary investigation of the problem of variable basic factors we took occasion to develop this chart for lower ranges of variability and the justification for its arbitrary limitation will be apparent when we consider that the application of 35% variability would assign a basic factor of .75 to Branch "A" and 1.50 to

Branches "E", "H", and "I". The spread separating these two extremes exceeds the efficiency variation in actual practice by a wide margin and explains the confinement of the variability figures to 100% and 80% only.

In the extreme right column of Exhibit 3 you will observe that we have inserted the branch designations opposite the volume classification established for each through the original quota segregation of the sales budget.

In the actual application of these basic factors, for example, Branch "C" is awarded 1.07 for each $1 of base expense rate. Similarly, Branch "A" is entitled to .93 for each $1 of base expense rate, bearing in mind that the base expense rates for all offices have been determined through averages developed from the combined actual expenses of all offices over a period of years. Having developed the inter-office basic factors, we proceed to their application against the base expense rates for the individual expense accounts. By reason of the numerous figures and accounts entering into this computation and the difficulty encountered in condensation upon the Exhibits, we have selected only a few accounts at random to illustrate the method of treatment.

Exhibit 4, in its first horizontal caption, lists the main branch offices controlled under the activity budget plan, together with the basic inter-office variability factors applicable to each branch. The vertical columns reading from the left provide the account number, account name, the general average base rates, the intra-office variability and finally the resulting normal expense rates allowed at 100% activity.

For the purpose of further illustrating the flexibility that must be introduced into these branch budgets, we have listed Account 538, "Telephone and Telegraph," wherein we employ two separate base rates, namely, $5.05 and $6.06 per $1,000 sales volume. The difference of 20% between these two figures is mandatory by the necessities of geographical location. Again long distances in the southern and western territories tend to increase this type of expense, and to compensate for this physical condition separate rates are used.

We ask that you observe the treatment of the fixed expense item represented in Account 673, "Depreciation on Buildings." No base

DEVELOPMENT OF HYPOTHETICAL BRANCH EXPENSE RATES PER $1,000 SALES VOLUME

EXHIBIT NO. 4

				BRANCH "A"	BRANCH "B"	BRANCH "C"	BRANCH "D"	BRANCH "E"	BRANCH "F"	BRANCH "G"	BRANCH "H"	BRANCH "I"
	BASIC FACTORS AT 100% VARIABILITY			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	BASIC FACTORS BELOW 100% VARIABILITY			.93	.97	1.07	1.00	1.16	.97	1.09	1.16	1.16
ACC'T NO.	NAME	BASE RATE	% VAR.									
523	ENTERTAINING	$1.40	35	$1.30	$1.36	$1.50	$1.40	$1.62	$1.36	$1.53	$1.62	$1.62
538	TELEPHONE & TELEGRAPH	5.05 6.06	65 65	4.70	4.90	5.40	5.05	7.03	5.88	6.61	7.03	7.03
605	SALARIES-ENG'RS & DRAFTSMEN	6.31	80	5.87	6.12	6.75	6.31	7.32	6.12	6.88	7.32	7.32
641	ERECTING TOOL EXPENSE	.90	100	.90	.90	.90	.90	.90	.90	.90	.90	.90
673	DEPRECIATION-BUILDINGS	SPECIAL	NONE	1.70	1.60	0.00	1.40	1.00	2.00	1.00	.50	2.00
	GRAND TOTAL EXPENSE RATES					$100.00						

rate is applied, each branch being assigned an allowance equivalent to the actual depreciation applicable to the capital assets in use.

In the last horizontal column we insert the total expense rates at normal for each branch and at this point are in a position to test out the total normal budget allowances of all branches combined by simply multiplying these aggregate base rates by the volume of each office. This permits us to determine in advance whether or not the ultimate budget totals to be derived by the use of these rates are acceptable in the light of the gross revenue available.

Development of Budgeted Allowances by Branches:

The base expense rates are inserted into the extreme right column of the individual branch office budget sheets, illustrated by Exhibit 5, across the top of which you will note the breakdown of the sales quota for that particular office as previously referred to and illustrated in connection with the activity schedules of Ex-

EXHIBIT NO. 5

BRANCH "C"
HYPOTHETICAL
ANNUAL ACTIVITY BUDGET
1932-33

1000 ACTIVITY - $1,000,000 VOLUME

LEGEND
VC - VARIABLE NOT CONTROLLABLE
CC - CONSTANT NOT CONTROLLABLE
F - FIXED

A/C NO.	SELLING EXPENSE	CLASS	% VARIABILITY	MINIMUM 750,000 MAXIMUM 850,000 AVERAGE 800,000 ACTIVITY $ 75-85	850,000 950,000 900,000 85-95	950,000 1,050,000 1,000,000 95--105	1,050,000 1,150,000 1,100,000 105-115	1,150,000 1,250,000 1,200,000 115-125	COST PER $1,000 VOLUME AT 100%
501	SALARIES-MDSE. & ADMTN.	VC		11,160	11,580	12,000	12,420	12,840	12.00
502	" -SALESMEN & DEF.	"		10,710	10,710	10,710	10,710	10,710	10.00
506	" -CLKS. & STENOGRS.	"		5,040	5,400	5,760	6,120	6,480	6.00
510	COMMISSIONS	"		3,500	4,250	5,000	5,750	6,500	5.00
512	TRAVELING	"							
514	AUTOMOBILE EXPENSE	"	75	6,540	6,755	7,000	7,245	7,490	7.00
516	ENTERTAINING	"	50	1,700	1,617	1,500	1,552	1,605	1.50
518	ADVERTISING	CC		1,200	1,200	1,200	1,200	1,200	1.20
520	SALES PROMOTION	"		150	150	150	150	150	.15
522	CREDIT & COLLECTION EXPENSE	VC		1,410	1,410	1,410	1,410	1,410	1.41
524	PROVISION FOR BAD DEBTS	"		2,850	2,850	3,000	3,150	3,300	3.00
526	DUES & SUBSCRIPTIONS	"		270	285	300	315	330	.30
528	CONTRIBUTIONS & DONATIONS	"		180	190	200	210	220	.20
530	STATIONERY & OFFICE SUPPLIES	"		1,350	1,425	1,500	1,575	1,650	1.50
532	TELEPHONE & TELEGRAPH	"		4,320	4,560	4,800	5,040	5,280	4.80
534	POSTAGE	"		2,700	2,850	3,000	3,150	3,300	3.00
536	REPAIRS-FURNITURE & FIXTURES	"		270	285	300	315	330	.30
538	RENT OF OFFICE	F		2,400	2,400	2,400	2,400	2,400	2.40
540	SUNDRY OFFICE EXPENSE	VC		1,410	1,410	1,410	1,410	1,410	1.41
542	LICENSE & CORPORATE TAXES	F		500	500	500	500	500	.50
544	DEPRECIATION-FURN. & FIX.	"		600	600	600	600	600	.60
546	" -AUTO. EQUIP.	"		450	450	450	450	450	.45
	TOTAL SELLING EXPENSE			64,415	65,007	71,800	75,193	78,395	71.80
	DELIV. EXECUTION & SERVICE								
601	SALARIES-MDSE. & ADMTN.	VC		2,790	2,850	2,910	2,970	3,030	2.91
602	" -EXECUTIVES EXC-SE	"		2,745	2,745	2,745	2,745	2,745	2.75
604	" -CLKS. & STENOGS.	"		2,376	2,484	2,592	2,700	2,808	2.59
606	" -OFF.IND. & DRAFTSMEN	"		3,672	3,780	3,888	3,996	4,104	3.89
608	" -SHPG. & MESS.	"		1,800	1,800	1,800	1,800	1,800	1.80
610	TRAVELING								
612	AUTOMOBILE EXPENSE	"	75	837	868	900	931	965	.90
614	CARTAGE	"		840	900	1,000	1,050	1,100	1.00
616	BLDG FRIGHT & SHARING EXP'L	"		1,350	1,350	1,350	1,350	1,350	1.35
618	SUPG. SUPPLIES & EXPENSE	"		675	675	675	675	675	.68
620	SHIPPING TOOL EXPENSE	"		150	150	150	150	150	.15
622	HEAT, LIGHT & POWER	CC		720	720	720	720	720	.72
624	REPAIRS-BUILDING	"		1,800	1,800	1,800	1,800	1,800	1.80
626	" -MACHY. & EQUIP.	"		900	900	900	900	900	.90
628	" -AUTO. EQUIP.	"		450	450	450	450	450	.45
630	RENT OF WAREHOUSE	F		1,200	1,200	1,200	1,200	1,200	1.20
632	FIRE INSURANCE	"		300	300	300	300	300	.30
634	LIABILITY INSURANCE	VC		1,104	1,104	1,104	1,104	1,104	1.10
636	TAXES	"		800	800	800	800	800	.80
638	DEPRECIATION-MACHY. & EQUIP.	"		300	300	300	300	300	.30
640	" -AUTO. EQUIP.	"		300	300	300	300	300	.30
	TOTAL D. E. & S. EXPENSE			24,767	25,203	25,662	26,169	26,633	25.66
	" " SELLING "			64,415	65,007	71,800	75,193	78,395	71.80
	GRAND TOTAL EXPENSE			89,122	90,210	97,462	101,362	105,028	97.46
	AVERAGE COST PER $1,000 VOLUME			111.40	100.23	97.46	92.24	87.52	
	SUMMARY-								
	TOTAL FIXED EXPENSE (F)			3,050	3,050	3,050	3,050	3,050	
	" CONTROLLABLE EXPENSE (C)			86,072	87,160	94,412	98,312	101,978	
	COST PER $1,000 FIXED EXPENSE			3.81	3.39	3.05	2.75	2.54	
	" " " CONTROLLABLE EXPENSE			107.59	96.84	94.41	89.38	84.98	

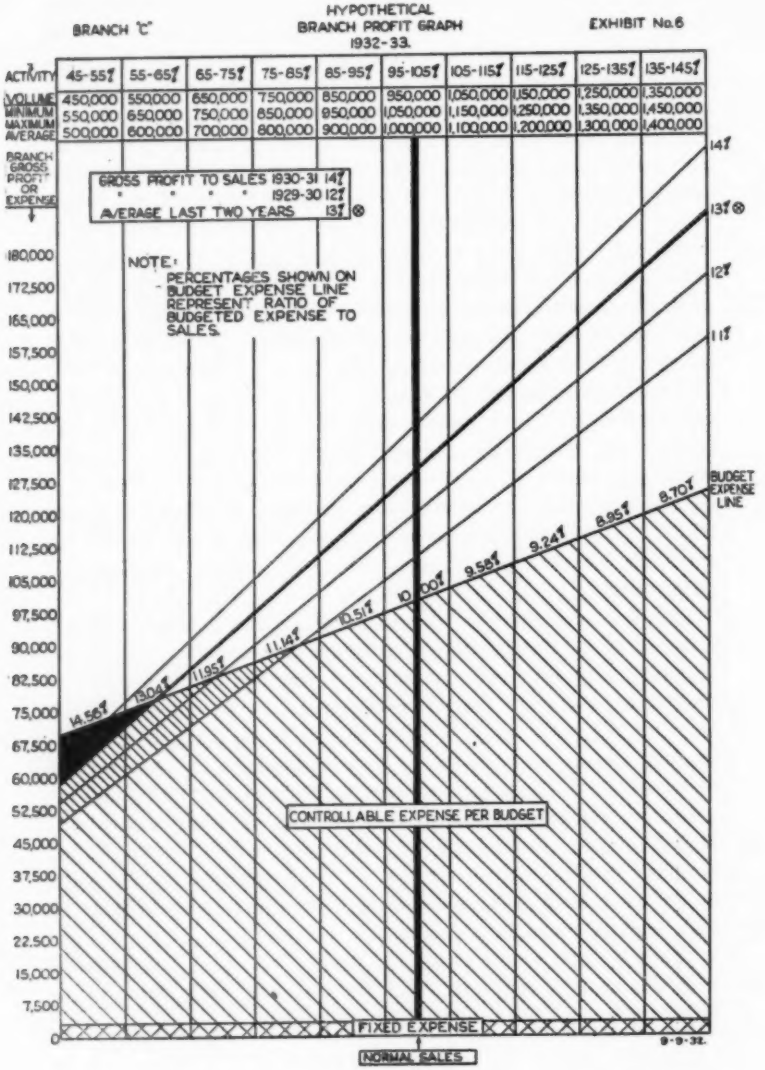
hibit 2. These base expense rates are then applied against the average normal volume and the total annual expense figures for each account developed for 100% activity. To illustrate the computation of the vertical columns for other activities, please note Account 521-22, "Traveling and Automobile Expense," of Branch "C". The base rate is $7 per $1,000, which multiplied by the average 100% volume of $1,000,000 provides an allowance of 100% of $7,000 annually. The variability for this account is shown at 35% and consequently the figure for the 90% column will be found to be 3½% lower than $7,000 or $6,755. The figure for the 80% column is 7% lower than the normal of $7,000 or $6,516. In order to accommodate this illustration to the exhibit we have shown only the columns from 80% to 120%, while on the budgets themselves we develop columns from 40% to 140% inclusive.

After these detailed computations are completed, the budgets are totalled and the aggregate results of all offices combined are studied with reference to the gross profits resulting from the sales volumes indicated by the various activity brackets. This study frequently points to the necessity for revisions to curtail expenses within the available revenue in the lower brackets and in such an event the detail expense rates must bear further scrutiny and adjustment.

In order to assist in the discussion of Exhibit 6, we invite your attention to the classification of the expense accounts appearing on Exhibit 5 wherein certain accounts are preceded by the letter "F", designating them as "Fixed," while others are preceded by "VC" or "CC" representing controllable items. Based upon these classifications the summary of the totals is set forth in the lower section of the exhibit. These figures form the basis of interesting and informative comparisons between offices and, in addition, are employed in the construction of what we term "Branch Profit Graphs" as illustrated in Exhibit 6.* A graph applicable to each individual branch is supplied along with the activity budgets to each regional manager involved.

While we believe the members of the N. A. C. A. are familiar with this type of graph we offer the following explanation of its salient points for the benefit of others present.

* The Profit Graph is used here through the courtesy of C. E. Knoeppel and the McGraw-Hill Publishing Company.


BRANCH "C"
HYPOTHETICAL BRANCH PROFIT GRAPH 1932-33.
EXHIBIT No. 6
ACTIVITY
45-55%
55-65%
65-75%
75-85%
85-95%
95-105%
105-115%
115-125%
125-135%
135-145%
VOLUME MINIMUM 450,000 550,000 650,000 750,000 850,000 950,000 1,050,000 1,150,000 1,250,000 1,350,000
MAXIMUM 550,000 650,000 750,000 850,000 950,000 1,050,000 1,150,000 1,250,000 1,350,000 1,450,000
AVERAGE 500,000 600,000 700,000 800,000 900,000 1,000,000 1,100,000 1,200,000 1,300,000 1,400,000
BRANCH GROSS PROFIT OR EXPENSE
GROSS PROFIT TO SALES 1930-31 14%
1929-30 12%
AVERAGE LAST TWO YEARS 13% ⊗
NOTE: PERCENTAGES SHOWN ON BUDGET EXPENSE LINE REPRESENT RATIO OF BUDGETED EXPENSE TO SALES.
180,000
172,500
165,000
157,500
150,000
142,500
135,000
127,500
120,000
112,500
105,000
97,500
90,000
82,500
75,000
67,500
60,000
52,500
45,000
37,500
30,000
22,500
15,000
7,500
0
14%
13%⊗
12%
11%
14.56%
13.04%
11.95%
11.14%
10.51%
10.00%
9.58%
9.24%
8.95%
8.70%
BUDGET EXPENSE LINE
CONTROLLABLE EXPENSE PER BUDGET
FIXED EXPENSE
NORMAL SALES
9-9-32.

Across the top of the graph we spread the various activity brackets of sales volume, the heavy vertical line representing normal, or 100%. The vertical scale of dollars in the left-hand margin represents expense and/or gross profits. The diagonal line forming the top border of the shaded area represents the total allowable expense taken from the activity budgets, and directly above the line are indicated the percentage ratios of expense to average volume in each bracket of activity.

Within the rectangular space near the upper left corner of the graph, we record the average gross branch profit developed during the past two years. This average is represented by the second diagonal line from the top. The intersection of this line with the total expense line signifies the "Break Even Point," of that particular branch. The other gross profit lines are introduced to illustrate the effect on increase or decrease in gross profit percentages.

The triangular, dark, solid area immediately below the budget expense line toward the left side of the graph indicates anticipated losses that will be incurred should the conditions of expense, sales and resulting gross profits in this area occur. In reality, these forecasted losses, shown in red on the original graphs, are losses due to volume variance and as long as the expense budgets are achieved the only escape from that area lies through the increase in sales volume or an improvement in the gross profit percentage on lower volumes by means of an increase in the sales price or a decrease in the cost of sales through more efficient execution of contract and open order installations.

The densely shaded area lying between the 13% and 11% lines immediately below the solid area is introduced simply to indicate the additional losses to be anticipated in the event the average gross profit secured during the past two years is permitted to decrease.

From this graph it is possible for the regional manager to determine at a glance the general results to be anticipated from any given set of conditions, providing of course that the expense budgets are equaled or improved upon. These graphs have proved of considerable interest and value to the managers in the field and we revise them at the end of each year, if at that time we find it necessary to alter any of the budget allowances.

While we have constructed similar graphs in connection with

factory operation including the cost of sales, we have found it best to rely upon gross profit percentages in connection with branch operations. It simplifies the graph for the use of the regional manager and eliminates much of the confusing details.

Method of Introducing Budget Plan:

In the introduction of any budget procedure for the purpose of controlling expenditures at the most effective point, namely, the point of disbursement—in our case, over wide expanses of territory—we were confronted with the absolute necessity of convincing the regional managers and branch organizations of the need for such control. In their hands lay the principal factor of success or failure of the plan.

Approximately six months before the activity budget plan was placed into effect a skeleton outline of its salient points was presented to the regional managers at a meeting held in York. At that time we informed them of the general rules that would be applied in the construction of the figures, giving them an overall picture of the manner in which the proposed budget would govern their operations, and gaining their acquiescence and approval of such control. After completion of the activity budgets the regional managers were again assembled at the factory and supplied with the detailed activity budgets, profit graphs and other schedules essential to its installation and operation. Their questions were invited and a full discussion entered into for the purpose of clarifying any points that proved obscure. They were informed at this time of the methods we intended following to furnish them with monthly comparisons between actual and budgeted expense and urged them to communicate with the budget department on any items that later varied from budget standards or allowances. The first year of operation many such questions were ironed out and during that period we inaugurated steps to verify actual accounting distributions on all expense items vouchered or paid by the branches, to the end that like accounts might be charged with similar expenses in all branches. To further assist in this matter, which is so vital to accurate inter-office comparisons, we elaborated upon our former branch chart of accounts and supplied additional detailed instruction for the proper accounting distribution of practically every expense item purchasing departments.

While there seems to be a general impression throughout current literature on this subject that the budgetary plan, or in fact any sweeping change of policy in the control of expense, is likely to meet with distrust and passive resistance, our method of approaching this subject seems to have encountered no such attitude for we have enjoyed the whole-hearted cooperation of the entire branch organization. In fact, the regional managers and branch managers have expressed their enthusiasm for the plan by reason of the advantages of having in their possession some standard by which to measure performance in their own districts. They are interested in the success of the corporation as a whole and fully appreciate the importance of curtailing expenses on a basis commensurate with the revenue available.

Our methods of constructing and applying the activity budget are open to their inspection and criticism and they are agreeable to having the statistical work performed by the budget department of the home office, thereby relieving them of that burden, which if saddled upon the branch would fail to coordinate the plan to a common goal and at the same time distract their attention from the real purpose of their existence, viz., sales and service.

Results Accomplished

During the first year of activity budget operation, our total branch expense was reduced almost 20% over the preceding year. This performance has served to emphasize the necessity and advantage of such control and particularly so when we bear in mind that drastic reductions had been made in a random manner during the year immediately preceding its introduction. The magnitude of the expense savings expressed by this percentage and its general effect upon the economic welfare of our company will be more fully appreciated when we inform you that we are dealing, not in ten thousands, nor one hundred thousands, but rather in millions.

Many of the detailed studies forming a part of the complete budget procedure have been omitted or alluded to in a cursory manner but we believe a sufficient outline has been laid before you to demonstrate the methods we have employed in the approach and treatment of its salient points.

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ACCIDENT PREVENTION

By E. S. McClary, Secretary-Treasurer,
Bridgeport Brass Company, Bridgeport, Conn.

FIRST and foremost I believe that the success of any accident prevention program depends largely upon the attitude and interest of the chief executive in the business.

During past years the responsibility of safety programs in some industries has been delegated to so-called *specialists* who may have headed certain functional control activities. These duties were usually referred to as separated or auxiliary departments as distinguished from production. We recall their distinction, such as industrial relationship, employee welfare, personnel division, and what not. It is obvious that such a separate organization had to depend almost wholly upon the cooperation of the works managers, superintendents, general foremen, and other production departments. These cooperative activities were quite prevalent during war years and post-war years, when it was believed that a high overhead rate was evidence of good cost accounting practice.

During the past three years industry has been obliged to economize and executives have learned some things about safety and accident prevention through elimination of the cooperative departments referred to above. In other words, executives have called in their works managers and general superintendents, and something like this has been said, "Well, boys, what can we do to reduce our accidents," and "After all, you know we are more or less dependent on you." By this I mean that executives have concentrated on works managers and superintendents who naturally in turn are expected to champion this cause and accept the responsibility for their respective organizations. Now, it does not matter particularly how this work is carried through in so far as the set-up is concerned, as long as the influence of the factory boss is sufficiently recognized by all his department heads.

In the past a great deal of emphasis has been placed on the need for safeguarding factory equipment. This has been one of the basic principles in any safety program. It should continue to be. Much has been written on this subject and I sincerely hope that this interest may be continued, as I have seen some sad accidents

on production equipment due to lack of proper safeguards. We have also heard a great deal about good housekeeping in our shops. This is also important, and so is the need for good light and general improved working conditions.

During recent years we have given more attention, relatively speaking, to the human side of our factory problems. Personally, my greatest interest lies in that direction, because after all it is with human beings we are dealing, and it should be the responsibility of each department head to safeguard the life and happiness of each employee coming under his supervision. It is the department head who should impress upon all employees within his scope, the necessity for using the greatest care at all times to prevent injury to themselves or cause injury to others. A careful study of this subject has made it plain that nearly all accidents are preventable, a majority of them being due to carelessness or thoughtlessness on the part of the person injured or some of his fellow workmen. The cooperation of employees is therefore necessary to prevent accidents and is a most important element in safety work.

A careful observance of a few common sense rules is more effective than all the expensive mechanical safeguards we might devise, and in this respect it should be thoroughly understood that the management regards as undesirable, the employee who will not safeguard himself or his fellow workers, and as such will subject himself to discipline or dismissal.

I am taking the liberty of referring to some of our general safety rules or regulations which we have established within our own plants:

1. "Be clean and orderly." A clean and orderly plant is a safe place in which to work. This company expects every employee to cooperate and do his part in this important task of good housekeeping.
2. The superintendent of your division and your foreman are your natural leaders in safety as well as production. You are expected to obey instructions and practice safety. If you don't know the safe way, stop and find out.
3. Don't wear ragged sleeves, loose coats, flowing ties or loose jumpers around moving machinery. Many fatal accidents have been caused from these things.

4. Don't oil or clean machinery while it is in operation unless ordered to do so by your foreman and under his personal supervision.
5. Take good care of property, machinery, equipment and material. The company entrusts its property in your keeping. Guard it like your own and protect your job.
6. Don't take short cuts over dangerous places as they are usually the shortest cuts to the hospital.
7. Scuffling, "horse-play" and practical jokes are positively forbidden. Compressed air must not be turned on anyone, as many eye and ear injuries and deaths have been caused thereby.
8. Strict attention must be paid to repair signs or tags placed on machinery, electric circuits, pipe lines, boilers, etc., and only the person putting on such a sign or tag is allowed to remove it. All warning signs must be carefully noted and their instructions followed. They have been installed for your protection. If there is any doubt, consult your foreman.
9. Under no conditions are materials or equipment to be placed in front of fire hydrants, hose houses or fire alarm boxes; an open passage must be left at all times so that fire equipment can be brought into instant use.
10. Material must be piled in an orderly manner and in such a way that it is not likely to fall. All traffic aisles must be kept clear.
11. This company maintains hospitals with a competent doctor and trained nurse in attendance. Every injury, including slight cuts and scratches, if blood is drawn, or there is a bruise or an abrasion, no matter how trivial, must be reported to your foreman at once. He will send you to the hospital for treatment immediately. Self-treatment of injuries received on the job is positively prohibited. Don't take chances. Infections are dangerous.
12. All dressings applied by the doctor or nurse must not be removed under any pretext and you are expected to report for redressings as often and as long as directed, or until you have been told by the nurse not to come for treatment any more.
13. Goggles must be worn on all jobs when prescribed as "Man-

datory for Eye Protection." Consult your foreman. Don't loan your goggles to other workmen as eye infections may be transmitted. Goggles may be obtained from the storekeeper free of charge by presenting a requisition signed by your foreman.

14. Employees are expected to wear safety shoes for foot protection. A large percentage of accidents is due to falling objects bruising or crushing toes and safety shoes are designed for their protection. Shoes of various styles, to suit your requirements, may be purchased from the storekeeper at cost and for your convenience installment payments may be arranged.

15. If you are taken sick on the job, you must report to your foreman before going home. If you are taken sick at home, call your family doctor and notify the employment office promptly by telephone or messenger.

Conclusion—This safety program has been set up and the hospitals are maintained by the company for the protection and welfare of its employees and their dependants. Remember that the best safety device known is a careful man and that safety and efficiency always go hand in hand. A good example is the best safety sermon.

Before passing on to other phases of our safety program, I want to emphasize the fact that the rules referred to above represent actual existing conditions within our plants, rather than goals which never become realistic. To illustrate: I recall one case where an employee was injured as a result of so-called "horseplay." The man who investigated this accident sensed the situation but could not obtain the actual facts due to group loyalty among the men on the job. This condition was promptly reported to the superintendent in charge who in turn gave the men an ultimatum, in effect, that if they did not come through clean within a given time as to the cause of the accident in question, he would feel obliged to discharge the entire group (consisting of three or four men, excepting the injured). This was no idle threat. The stand taken by the "big boss" changed somewhat the picture for the men involved, resulting in a complete and humble confession on the part of the man who was responsible for the unworthy act. The

man was discharged as an example to others, as we positively will not harbor such acts at the risk of injury to other employees.

A certain amount of discipline is necessary in connection with slight injuries to safeguard against infection developing. This also applies in connection with dressings by the doctor and nurse.

Quite a story could be written around the use of goggles. Our company has supplied goggles for certain jobs for many years. We found, however, upon a closer check-up that the use of them was more or less optional on the part of the employee. This condition was discussed at quite some length by our safety committee, resulting in a very thorough and careful review in connection with the eye hazard on jobs such as grinding, casting shop, use of sulphuric acid, etc. We decided that if goggles were needed certain disciplinary rules would have to be established, making it positively obligatory on the part of the workmen to wear goggles on all jobs so specified. This decision brought us to another angle of our problem. We found that several of these jobs were performed by employees who already wore glasses, and goggles could not be satisfactorily fitted over them. This led us to consider eye examination whenever a man was required to wear goggles, which revealed some very interesting cases. I recall in one department we found a man working without glasses under a tremendous handicap. His vision tested about 12% normal, and another man in the same department tested about 15% normal. In both of these instances the company supplied goggles with prescription lenses. It may be said that with these two men we opened up a new world to them. This experience further led us to consider eye test of all our employees. The work is being carried through gradually, and it has disclosed some astounding cases. It should be understood, however, that unless the job is described as "Mandatory for Eye Protection," the company does not pay for prescription glasses. The purpose of our test is to detect faulty eyesight and advise the employees to see an eye specialist.

In our company we have two general safety committees, one for each plant. The personnel of these committees is as follows:

Chairman—Plant Works Manager.

Secretary—Employment Manager.

Other Members—(Engineer, under direction of Works Mgr. Company Official, Superintendents.)

Meetings are held twice a month by each committee, when all current matters of safety are discussed, and particularly conditions surrounding any accidents which may have occurred during the two weeks previous to the meeting. When a lost time accident has occurred, the foreman of the injured person is also requested to attend, giving him an opportunity to explain to the committee the circumstances surrounding the accident. It also gives the chairman an opportunity to talk "turkey," if occasion demands, directly to his subordinates in respect to their responsibilities.

We classify our accidents into four groups, namely:

1. Minor scratches and cuts (nurse's cases)
2. Injuries from unsafe practices (nurse's cases) such as second degree burns or comparatively slight injuries from faulty equipment, not serious enough to employ the doctor's attention.
3. All doctor's cases.
4. All lost time cases.

All accidents are investigated promptly and thoroughly. It is generally known and felt that the engineer performing this duty has the support and authority from his works manager, and any case where he feels that he is not getting the full cooperation of witnesses, he can appeal effectively to the superintendent of the division. In instances where there appears to be some element of dissatisfaction, we secure, if possible, signed testimony from witnesses to the alleged accident. Such evidence has proven very helpful when such claims come before the compensation commissioner for settlement, sometimes several months afterward. A complete dictated typewritten report is made on each accident coming under Classifications 2, 3 and 4, each member of the safety committee receiving a copy. Copies of Classifications 3 and 4 are also given to the president and general manager. Reports covering Class 4 accidents are always written in *red,* obviously to attract attention.

A great deal may be said about poster service. We use them as a part of our educational program. I believe, however, that some of our own posters have attracted more interest than those procured outside. To illustrate: I recall an accident several months ago in our casting shop, when a man's face was severely burned by hot metal. Fortunately, he was wearing the proper

goggles which saved his eyesight. This employee very willingly consented to have a photograph taken of his face. This was enlarged and used in making up posters wherein we told the story briefly. Other posters have been made showing in rather spectacular form the seriousness attached to infections, and when you can state directly that this has been the experience of some one fellow worker, it seems to me that it carries much more weight among the employees generally than pictures purchased outside, which carry no personal interest other than conveying the safety thought.

We have organized competitive campaigns on lost time accident experience, giving suitable recognition to divisions that come through with the best records. During this past year our manufacturing plant had a clean slate for a period of 125 successive working days without a lost time accident. The mill, which is relatively more hazardous, piled up a *no* lost time accident record of 71 days, and several production departments within these plants came through the entire year without a lost time accident.

In commenting on our safety rules I refer to the physical well-being of our employees, particularly in respect to eyesight. Our company for several years has required that all applicants for labor submit to a physical examination. This, of course, is done for two or three reasons: Primarily, perhaps, to weed out those that are physically unfit. Also, it gives us information that helps to intelligently assign applicants to jobs for which they are best fitted.

At some future time, not far distant, industry is going to realize the need for a closer follow-up on the general physical condition of all wage earners, not for any unfair motive on the part of the employer, but rather for the mutual benefit of both employer and employee.

Men who do not, unfortunately, measure up to physical standards required, should not be placed on hazardous jobs. It is too dangerous ..... and remember, the employer is accountable under the Workmen's Compensation Law.

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THE TECHNICAL PROGRAM

of the

FOURTEENTH INTERNATIONAL COST CONFERENCE

of the

NATIONAL ASSOCIATION OF COST ACCOUNTANTS

at the

Waldorf-Astoria Hotel, New York City
June 12, 13, 14, 15, 1933

Tuesday Morning, June 13:

The Reconstruction of the Balance Sheet (two papers)

1. Adjustment of Capital Assets and Structure in View of Present-Day Conditions.
2. Case Study of the Factors Which Should Be Considered Prior to the Development of a New Line of Product.

Tuesday Afternoon:

Pricing for Profit (two papers)

1. The Economic Features and Effects.
2. What the Cost Accountant Can Do About It.

Wednesday Morning, June 14:

Municipal Accounting (two papers)

1. The Principles of Municipal Accounting Compared With Industrial Accounting.
2. The Practical Application of Cost Accounting to City and County Functions.

Wednesday Afternoon:

Debatable Points in Cost Accounting.

1. This will be a session similar to those we used to conduct some years ago, at which a number of controversial subjects in the field of industrial accounting will be taken up one by one for round-table discussion.

Thursday Morning, June 15:

Budgetary Control for the Small Business (two papers)

1. Definite Presentation of the Factors To Be Considered and the Results To Be Obtained.
2. The Accounting Mechanics for the Development, Presentation, Control and Revision of the Budget.

Thursday Afternoon:

Standards and Their Application to Distribution (two papers)

1. Problems of the Development of Standards for a Small Business Selling to Producers.
2. Problems of the Development of Standards for a Small Business Selling to Consumers.